

CLAIMS

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2 The invention claimed is:

- 3 1. A rear peep sight for mounting to a string of a bow and having
4 interchangeable sight ports for accommodating different user
5 preferences, said sight comprising:
6 a) a mounting member; and
7 b) a sighting member;
8 wherein said mounting member is for mounting to the string of the
9 bow; and
10 wherein said sighting member is attached to said mounting member.
- 11 2. The sight as defined in claim 1, wherein said sighting member is
12 interchangeably attached to said mounting member so as to
13 accommodate different user preferences of sight ports.
- 14 3. The sight as defined in claim 1, wherein said mounting member is
15 generally oval-shaped; and
16 wherein said mounting member is vertically-oriented.
- 17 4. The sight as defined in claim 1, wherein said mounting member has
18 a forward-facing surface;
19 wherein said mounting member has a rearward-facing surface; and
20 wherein said mounting member has a pair of sideward-facing surfaces.
- 21 5. The sight as defined in claim 4, wherein said pair of sideward-
22 facing surfaces of said mounting member have a pair of grooves
23 running therealong, respectively; and
24 wherein said pair of grooves in said pair of sideward-facing
25 surfaces of said mounting member, respectively, are for tightly

1 receiving the string of the bow so as to thereby mount said rear
2 peep sight to the string of the bow.

3 6. The sight as defined in claim 4, wherein said mounting member has
4 a sighting through bore;
5 wherein said sighting through bore in said mounting member extends
6 substantially centrally through said mounting member; and
7 wherein said sighting through bore in said mounting member extends
8 from said forward-facing surface of said mounting member to said
9 rearward-facing surface of said mounting member.

10 7. The sight as defined in claim 6, wherein said mounting member has
11 an alignment arm;
12 wherein said alignment arm of said mounting member is for reducing
13 and helping prevent twisting or axial rotation of said rear peep
14 sight about the string of the bow; and
15 wherein said alignment arm of said mounting member extends
16 incliningly upwardly from said forward-facing surface of said
17 mounting member, above said sighting through bore in said mounting
18 member, to a terminal free end.

19 8. The sight as defined in claim 7, wherein said alignment arm of said
20 mounting member is slender;
21 wherein said alignment arm of said mounting member is elongated; and
22 wherein said alignment arm of said mounting member is rod-like.

23 9. The sight as defined in claim 8; further comprising an elastic cord;
24 wherein said elastic cord is attached to said terminal free end of
25 said alignment arm of said mounting member; and
26 wherein said elastic cord extends from said terminal free end of
27 said alignment arm of said mounting member for attaching to the bow
28 by a mount, and by so doing, as the string of the bow is drawn

- 1 rearward, said elastic cord urges said alignment arm into alignment
2 with the bow, thus precluding axial twist of said rear peep sight
3 about the string of the bow and keeping said sighting member
4 disposed generally perpendicular to a line of sight of an archer.
- 5 10. The sight as defined in claim 7, wherein said alignment arm extends
6 along a plane which is thirty-five degrees from a plane in which
7 said mounting member lies.
- 8 11. The sight as defined in claim 7, wherein said mounting member has
9 a visor;
10 wherein said visor of said mounting member is for reducing glare;
11 wherein said visor of said mounting member extends incliningly
12 downwardly from said rearward-facing surface of said mounting
13 member;
14 wherein said visor of said mounting member is disposed above said
15 sighting through bore in said mounting member; and
16 wherein said visor of said mounting member is disposed below the
17 elevation of said alignment arm of said mounting member.
- 18 12. The sight as defined in claim 11, wherein said visor of said
19 mounting member is convex-concave-shaped.
- 20 13. The sight as defined in claim 6, wherein said rearward-facing
21 surface of said mounting member has a channel;
22 wherein said channel extends transversely in said rearward-facing
23 surface of said mounting member;
24 wherein said channel in said rearward-facing surface of said
25 mounting member extends from one side surface of said pair of side
26 surfaces of said mounting member to the other side surface of said
27 pair of side surfaces of said mounting member;

1 wherein said channel in said rearward-facing surface of said
2 mounting member opens into said one side surface of said pair of
3 side surfaces of said mounting member;
4 wherein said channel in said rearward-facing surface of said
5 mounting member opens into said other side surface of said pair of
6 side surfaces of said mounting member; and
7 wherein said channel in said rearward-facing surface of said
8 mounting member communicates with said sighting through bore in said
9 mounting member.

10 14. The sight as defined in claim 13, wherein said channel in said
11 rearward-facing surface of said mounting member is defined by an
12 upper wall;
13 wherein said channel in said rearward-facing surface of said
14 mounting member is defined by a lower wall; and
15 wherein said upper wall and said lower wall defining said channel
16 in said rearward-facing surface of said mounting member both extend
17 transversely across said rearward-facing surface of said mounting
18 member.

19 15. The sight as defined in claim 14, wherein said upper wall defining
20 said channel in said rearward-facing surface of said mounting member
21 extends forwardly and upwardly in said rearward-facing surface of
22 said mounting member and said lower wall defining said channel in
23 said rearward-facing surface of said mounting member extends
24 forwardly and downwardly in said rearward-facing surface of said
25 mounting member so as to allow said channel in said rearward-facing
26 surface of said mounting member to diverge forwardly.

27 16. The sight as defined in claim 14, wherein said mounting member has
28 a pair of through bores;

- 1 wherein said pair of through bores in said mounting member extend
2 laterally through said mounting member; and
3 wherein said pair of through bores in said mounting member extend
4 from said forward-facing surface of said mounting member to said
5 rearward-facing surface of said mounting member.
- 6 17. The sight as defined in claim 16, wherein said pair of through bores
7 in said mounting member are horizontally-aligned with each other.
- 8 18. The sight as defined in claim 16, wherein said pair of through bores
9 in said mounting member straddle said sighting through bore in said
10 mounting member.
- 11 19. The sight as defined in claim 16, wherein said pair of through bores
12 in said mounting member are not threaded.
- 13 20. The sight as defined in claim 16, wherein said sighting member is
14 a plate.
- 15 21. The sight as defined in claim 20, wherein said plate of said
16 sighting member is slidably received in said channel in said
17 rearward-facing surface of said mounting member, from either
18 sideward-facing surface of said pair of sideward-facing surfaces of
19 said mounting member.
- 20 22. The sight as defined in claim 20, wherein said plate of said
21 sighting member is generally rectangular-shaped; and
22 wherein said plate of said sighting member is horizontally-oriented.
- 23 23. The sight as defined in claim 20, wherein said plate of said
24 sighting member has a forward-facing surface;

1 wherein said plate of said sighting member has a rearward-facing
2 surface;
3 wherein said plate of said sighting member has an upper-facing
4 surface; and
5 wherein said plate of said sighting member has a lower-facing
6 surface.

7 24. The sight as defined in claim 23, wherein said upper-facing surface
8 of said plate of said sighting member extends forwardly and upwardly
9 from said rearward-facing surface of said plate of said sighting
10 member to said forward-facing surface of said plate of said sighting
11 member and said lower-facing surface of said plate of said sighting
12 member extends forwardly and downwardly from said rearward-facing
13 surface of said plate of said sighting member to said forward-facing
14 surface of said plate of said sighting member so as to allow said
15 plate of said sighting member to converge rearwardly.

16 25. The sight as defined in claim 23, wherein said upper-facing surface
17 of said plate of said sighting member is captured by said upper wall
18 defining said channel in said rearward-facing surface of said
19 mounting member and said lower-facing surface of said plate of said
20 sighting member is captured by said lower wall defining said channel
21 in said rearward-facing surface of said mounting member when said
22 plate of said sighting member is slid sideways into said channel in
23 said rearward-facing surface of said mounting member so as to
24 provide a dove-tail joint that prevents said plate of said sighting
25 member from vertical movement once said plate of said sighting
26 member is in said channel in said rearward-facing surface of said
27 mounting member, yet allows for horizontal movement so as to allow
28 said plate of said sighting member to slide sideways into said
29 channel in said rearward-facing surface of said mounting member.

- 1 26. The sight as defined in claim 23, wherein said plate of said
2 sighting member has a sighting through bore;
3 wherein said sighting through bore in said plate of said sighting
4 member extends substantially centrally through said plate of said
5 sighting member;
6 wherein said sighting through bore in said plate of said sighting
7 member extends from said rearward-facing surface of said plate of
8 said sighting member to said forward-facing surface of said plate
9 of said sighting member; and
10 wherein said sighting through bore in said plate of said sighting
11 member is aligned with said sighting through bore in said mounting
12 member once said plate of said sighting member is in said channel
13 in said rearward-facing surface of said mounting member.
- 14 27. The sight as defined in claim 26, wherein said sighting through bore
15 in said plate of said sighting member has a shape for accommodating
16 different user preferences.
- 17 28. The sight as defined in claim 26, wherein said plate of said
18 sighting member has an auxiliary through bore;
19 wherein said auxiliary through bore in said plate of said sighting
20 member extends through said plate of said sighting member, from said
21 rearward-facing surface of said plate of said sighting member to
22 said forward-facing surface of said plate of said sighting member;
23 wherein said auxiliary through bore in said plate of said sighting
24 member is positioned to one side of said sighting through bore in
25 said plate of said sighting member; and
26 wherein said auxiliary through bore in said plate of said sighting
27 member is aligned with one through bore of said pair of through
28 bores in said mounting member once said plate of said sighting
29 member is in said channel in said rearward-facing surface of said
30 mounting member.

- 1 29. The sight as defined in claim 28, wherein said auxiliary through
2 bore in said plate of said sighting member is threaded.
- 3 30. The sight as defined in claim 29, wherein said plate of said
4 sighting member has a pimple;
5 wherein said pimple of said plate of said sighting member extends
6 rearwardly from said rearward-facing surface of said plate of said
7 sighting member;
8 wherein said pimple of said plate of said sighting member is
9 positioned to the other side of said sighting through bore in said
10 plate of said sighting member;
11 wherein said pimple of said plate of said sighting member is
12 horizontally-aligned with said auxiliary through bore in said plate
13 of said sighting member; and
14 wherein said pimple of said plate of said sighting member is engaged
15 by the other through bore of said pair of through bores in said
16 mounting member once said plate of said sighting member is in said
17 channel in said rearward-facing surface of said mounting member so
18 as to prevent said plate of said sighting member from horizontal
19 movement once said plate of said sighting member is in said channel
20 in said rearward-facing surface of said mounting member.
- 21 31. The sight as defined in claim 28, wherein said sighting member has
22 a screw; and
23 wherein said screw of said sighting member extends freely through
24 one through bore of said pair of through bores in said mounting
25 member, from said forward-facing surface of said mounting member,
26 and threadably into said auxiliary through bore in said plate of
27 said sighting member, from said forward-facing surface of said plate
28 of said sighting member, so as to maintain prevention of said plate
29 of said sighting member from horizontal movement once said plate of

1 said sighting member is in said channel in said rearward-facing
2 surface of said mounting member.

3 32. The sight as defined in claim 30, wherein said plate of said
4 sighting member is positioned either right-side-up or up-side-down
5 in said channel in said rearward-facing surface of said mounting
6 member depending upon what shape a user desires for said sighting
7 through bore in said plate of said sighting member by virtue of said
8 pair of through bores in said mounting member not being threaded and
9 said auxiliary through bore in said plate of said sighting member
10 being threaded and horizontally-aligned with said pimple of said
11 plate of said sighting member.